MACHINE LEARNING, ARTIFICIAL INTELLIGENCE, AND DATA (MAD) LANDSCAPE 2021

INFRASTRUCTURE

STORAGE · **HADOOP** · **DATA LAKES** · **DATA WAREHOUSES** · **STREAMING / IN-MEMORY**

RDBMS · **NoSQL DATABASES** · **NewSQL DATABASES** · **REAL TIME DATABASES** · **GRAPH DBs**

MPP DBs · **ETL / ELT / DATA TRANSFORMATION** · **REVERSE ETL** · **DATA INTEGRATION** · **DATA GOVERNANCE & ACCESS**

PRIVACY & SECURITY · **DATA OBSERVABILITY** · **MGMT / MONITORING** · **SERVERLESS** · **CLUSTER SVCS** · **DATA QUALITY**

ANALYTICS

BI PLATFORMS · **VISUALIZATION**

DATA ANALYST PLATFORMS · **AUGMENTED ANALYTICS**

DATA CATALOG AND DISCOVERY · **METRICS STORE** · **LOG ANALYTICS**

QUERY ENGINE · **SEARCH**

MACHINE LEARNING & ARTIFICIAL INTELLIGENCE

DATA SCIENCE NOTEBOOKS · **DATA SCIENCE PLATFORMS** · **ML PLATFORMS**

DATA GENERATION & LABELLING · **MODEL BUILDING** · **FEATURE STORE** · **DEPLOYMENT & PRODUCTION** · **MODEL MONITORING & OBSERVABILITY**

COMPUTER VISION · **SPEECH** · **NLP** · **SYNTHETIC MEDIA**

HORIZONTAL AI · **GPU DBS & CLOUD** · **AI HARDWARE**

APPLICATIONS – ENTERPRISE

SALES · **MARKETING - B2B** · **MARKETING - B2C** · **CUSTOMER EXPERIENCE / SERVICE** · **HUMAN CAPITAL**

LEGAL · **REGTECH & COMPLIANCE** · **FINANCE** · **AUTOMATION & RPA** · **SECURITY** · **PARTNERSHIPS**

APPLICATIONS – INDUSTRY

ADVERTISING · **EDUCATION** · **REAL ESTATE** · **GOV'T & INTELLIGENCE** · **COMMERCE** · **FINANCE - LENDING** · **INSURANCE**

FINANCE - INVESTING

HEALTHCARE · **LIFE SCIENCES** · **TRANSPORTATION** · **AGRICULTURE** · **INDUSTRIAL** · **OTHER**

OPEN SOURCE

FRAMEWORKS · **FORMAT** · **QUERY / DATA FLOW** · **DATA ACCESS** · **DATABASES** · **ORCHESTRATION** · **INFRASTRUCTURE** · **DATA OPS** · **STREAMING & MESSAGING** · **STAT TOOLS & LANGUAGES** · **ML OPS & INFRA** · **AI / MACHINE LEARNING / DEEP LEARNING** · **SEARCH** · **LOGGING & MONITORING** · **VISUALIZATION** · **COLLABORATION** · **SECURITY**

DATA SOURCES & APIs

DATA MARKETPLACES & DISCOVERY · **FINANCIAL & ECONOMIC DATA** · **AIR / SPACE / SEA** · **PEOPLE / ENTITIES** · **LOCATION INTELLIGENCE** · **OTHER**

DATA RESOURCES

DATA SERVICES · **INCUBATORS & SCHOOLS** · **RESEARCH**